

Faculty of Sciences

Bachelor of Science in Mathematics

Language of instruction: Dutch

Programme version 15

1 General Courses 156 credits

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C003554 Linear Algebra and Geometry I <i>Arne Van Antwerpen -- Department of Mathematics: Algebra and Geometry</i>	6		1	A:1	180
2	C003574 Analysis I <i>Jasson Vindas Diaz -- Department of Mathematics: Analysis, Logic and Discrete Mathematics</i>	6		1	A:1	180
3	C003550 Discrete Mathematics I <i>Leo Storme -- Department of Mathematics: Analysis, Logic and Discrete Mathematics</i>	6		1	A:1	180
4	C003770 Programming <i>Kris Coolsaet -- Department of Mathematics, Computer Science and Statistics</i>	6		1	A:1	180
5	C003552 Computer Project Mathematics <i>Tom De Medts -- Department of Mathematics: Algebra and Geometry</i>	4		1	A:1	100
6	C003555 Linear Algebra and Geometry II <i>Hendrik Van Maldeghem -- Department of Mathematics: Algebra and Geometry</i>	6		1	A:2	165
7	C003575 Analysis II <i>Hans Vernaeve -- Department of Mathematics: Analysis, Logic and Discrete Mathematics</i>	8		1	A:2	200
8	C003551 Discrete Mathematics II <i>Bart De Bruyn -- Department of Mathematics: Algebra and Geometry</i>	6		1	A:2	165
9	C004210 Theoretical Mechanics <i>Dimitri Van Neck -- Department of Physics and Astronomy</i>	6		1	A:2	180
10	C003607 General Physics <i>Henk Vrielinck -- Department of Solid State Sciences</i>	6		1	A:2	165
11	C003557 Algebra I <i>Tom De Medts -- Department of Mathematics: Algebra and Geometry</i>	6		2	A:1	180
12	C003568 Complex Analysis <i>Hans Vernaeve -- Department of Mathematics: Analysis, Logic and Discrete Mathematics</i>	6		2	A:1	165
13	C002794 Algorithms and Data Structures <i>Veerle Fack -- Department of Mathematics, Computer Science and Statistics</i>	6		2	A:1	165
14	C003558 Statistics I <i>Stijn Vansteelandt -- Department of Mathematics, Computer Science and Statistics</i>	6		2	A:1	165
15	C004420 Differential Geometry <i>Frederik Brucke -- Department of Mathematics: Analysis, Logic and Discrete Mathematics</i>	6		2	A:2	165
16	C003569 Topology and Metric Spaces <i>Hans Vernaeve -- Department of Mathematics: Analysis, Logic and Discrete Mathematics</i>	6		2	A:2	180
17	C003608 Numerical Analysis <i>Marnix Van Daele -- Department of Mathematics, Computer Science and Statistics</i>	6		2	A:2	165
18	C003559 Statistics II: Project <i>Martial Luyts -- Department of Mathematics, Computer Science and Statistics</i>	6		2	A:2	165
19	C000313 Projective Geometry <i>Bart De Bruyn -- Department of Mathematics: Algebra and Geometry</i>	6		3	A:1	165
20	C003570 Function Spaces <i>Hendrik De Bie -- Department of Electronics and Information Systems</i>	6		3	A:1	180

21	C003563	Optimisation <i>Veerle Fack -- Department of Mathematics, Computer Science and Statistics</i>	6	3	A:1	165
22	C003560	Statistics III: Regression Analysis [en, nl] <i>Stijn Vansteelandt -- Department of Mathematics, Computer Science and Statistics</i>	6	3	A:1	165
23	C004110	Algebra II <i>Arne Van Antwerpen -- Department of Mathematics: Algebra and Geometry</i>	6	3	A:2	180
24	C003562	Logic <i>Andreas Weiermann -- Department of Mathematics: Analysis, Logic and Discrete Mathematics</i>	6	3	A:2	165
25	C004010	Mathematical Modeling <i>Marnix Van Daele -- Department of Mathematics, Computer Science and Statistics</i>	6	3	A:2	180
26	C003573	Bachelor Project <i>N. N.</i>	6	3	A:2	165

2 Minors

18 credits

Subscribe to 1 minor from the following list. Subject to approval by the faculty.
Students who have followed the Minor Education, can enter directly into the educational master's programme.

2.1 Minor Life Sciences

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:

- 12 credit units in year 2,
- 6 credit units in year 3.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C003625 Population Processes <i>Luc Lens -- Department of Biology</i>	6			A:1	180
2	C003390 Introduction to Life Sciences <i>Peter Vandenabeele -- Department of Molecular Biology</i>	6			A:2	165
3	C001479 Introduction to Bioinformatics <i>Kathleen Marchal -- Department of Plant Biotechnology and Bioinformatics</i>	6			A:2	165

2.2 Minor Economics

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:

- 12 credit units in year 2,
- 6 credit units in year 3.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	F000758 Economics <i>Bruno Merlevede -- Department of Economics</i>	6			A:1	165
2	F000804 Financial Mathematics <i>Michèle Vanmaele -- Department of Mathematics, Computer Science and Statistics</i>	6			A:2	180
3	F000446 Markets and Prices <i>Dirk Van de gaer -- Department of Economics</i>	6			A:1	180
4	C002995 Game Theory <i>Dirk Van de gaer -- Department of Economics</i>	6			A:1	165

2.3 Minor Informatics

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:

- 12 credit units in year 2,
- 6 credit units in year 3.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C003771 Databases <i>Guy De Tré -- Department of Telecommunications and Information Processing</i>	6			A:1	180
2	C003772 Object Oriented Programming <i>Kris Coolsaet -- Department of Mathematics, Computer Science and Statistics</i>	6			A:2	180
3	C003777 Algorithms and Data Structures 2 <i>Gunnar Brinkmann -- Department of Mathematics, Computer Science and Statistics</i>	6			A:1	180
4	C003776 System Programming <i>Filip De Turck -- Department of Information Technology</i>	6			A:1	180

2.4 Minor Physics

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:

- 12 credit units in year 2,
- 6 credit units in year 3.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	C002240 Quantum Mechanics 1 <i>Jan Ryckebusch -- Department of Physics and Astronomy</i>	6			A:1	180

2	C004206	Stars and Planets <i>Sven De Rijcke -- Department of Physics and Astronomy</i>	6	A:2	180
3	C002245	Quantum Mechanics 2 <i>Dimitri Van Neck -- Department of Physics and Astronomy</i>	6	A:1	180
4	C004214	Galaxies <i>Ilse De Looze -- Department of Physics and Astronomy</i>	6	A:2	180
5	C004216	Relativity and Electromagnetism [en] <i>Archisman Ghosh -- Department of Physics and Astronomy</i>	6	A:2	180

2.5 Minor Education

Subscribe to 18 credit units from the following list, distributed over the first standard learning path as follows:

- 12 credit units in year 2,
- 6 credit units in year 3.

Nr	Course	CRDT	Ref	MT1	Session	Study
1	H002169 Powerful Learning Environments <i>Bram De Wever -- Department of Educational Studies</i>	6		2	A:1	180
2	H002175 Teaching Methodology: Sciences <i>Katrien Strubbe -- Department of Chemistry</i>	6		3	A:J	180
3	H002170 Reference Internship: Sciences <i>Katrien Strubbe -- Department of Chemistry</i>	3		2	A:J	90
4	C004093 Mathematical Skills and Know-how <i>Koen Thas -- Department of Mathematics: Algebra and Geometry</i>	3		2	A:2	85

3 Elective Courses

6 credits

3.1 Elective Courses UGent or other Universities

Subscribe to 6 credit units from the study programmes of UGent including the [Ghent University elective courses](#), other universities of the Flemish Community or, [Erasmus+ partner universities](#) including the [ENLIGHT \(online\) elective courses](#). Distributed over the first standard learning path as follows: 6 credit units in year 3. Subject to approval by the faculty.

Teaching

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the course name, using the following ISO codes:

bg: Bulgarian	de: German	es: Spanish	ja: Japanese	pl: Polish	sh: Croatian/Serbian	zh: Chinese
cs: Czech	el: Greek	fr: French	nl: Dutch	pt: Portuguese	sl: Slovene	
da: Danish	en: English	it: Italian	no: Norwegian	ru: Russian	sv: Swedish	

Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2. When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.

When a semester is shown in brackets, the course is not offered this year in the specific offering.

The offering frequency and first year of offering are indicated by the following codes:

a: bi-annually	c: annually, from 2024-2025	f: annually, from 2025-2026	i: annually, from 2026-2027
b: tri-annually	d: bi-annually, from 2024-2025	g: bi-annually, from 2025-2026	j: bi-annually, from 2026-2027
	e: tri-annually, from 2024-2025	h: tri-annually, from 2025-2026	k: tri-annually, from 2026-2027